WHAT IS CLAIMED IS:

1. A programmable controller which executes a user program process, an I/O refresh process and a peripheral service process by using a same microprocessor, comprising:

normal process means for cyclically executing the user program process and I/O refresh process according to a normal procedure;

interruption trigger generating means for generating an interruption trigger at a prescribed interval; and

interruption process means for interrupting the user program process by the normal process means and executing the peripheral service process by a prescribed amount according to an interruption procedure every time an interruption trigger is generated.

2. A programmable controller according to claim 1, further comprising changing means for changing the interval of generating an interruption trigger by the interruption trigger generating means.

3. A programmable controller according to claim 1, further comprising changing means for changing the time duration of executing the peripheral service process by the interruption process means.

4. A programmable controller according to claim 1, further comprising means for prohibiting an external interruption during the execution of the user program process in response to reading a prescribed interruption mask command, and canceling the prohibition of the external interruption during the execution of the user program process in response to reading a prescribed interruption mask cancel command.

5. A programmable controller according to claim 1, wherein the prescribed interval is determined by the sum of the time duration of executing the previous peripheral service process and a prescribed time period.

6. A programmable controller which executes a user program process, an I/O refresh process and a peripheral service process by using a same microprocessor, comprising:

means for selecting a first mode and a second mode;

the first mode being for cyclically executing the user program process and I/O refresh process according to a normal procedure, and the second mode being for executing the peripheral service process by a prescribed amount at a regular interval according to an interruption procedure while executing the user program process and I/O refresh process according to the normal procedure.